



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-6431; Directorate Identifier 2015-NM-182-AD; Amendment 39-18823; AD 2017-05-12]

RIN 2120-AA64

Airworthiness Directives; Airbus Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Airbus Model A318-112 airplanes, A319-111, -112, -115, -132, and -133 airplanes, A320-214, -232, and -233 airplanes, and A321-211, -212, -213, -231, and -232 airplanes. This AD was prompted by a quality control review on the final assembly line, which determined that aluminum alloy with inadequate heat treatment had been delivered and used on several structural parts. This AD requires a one-time eddy current conductivity measurement of certain cabin, cargo compartment, and frame structural parts to determine if aluminum alloy with inadequate heat treatment was used, and replacement if necessary. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Airbus, Airworthiness Office – ELAS, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone: +33 5 61 93 36 96; fax: +33 5 61 93 44 51; email: account.airworth-eas@airbus.com; Internet: <http://www.airbus.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-6431.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-6431; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone 800-647-5527) is Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone: 425-227-1405; fax: 425-227-1149.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Airbus Model A318-112 airplanes, A319-111, -112, -115, -132, and -133 airplanes, A320-214, -232, and -233 airplanes, and A321-211, -212, -213, -231, and -232 airplanes. The NPRM published in the Federal Register on May 11, 2016 (81 FR 29209). The NPRM was prompted by a quality control review on the final assembly line, which determined that aluminum alloy with inadequate heat treatment had been delivered and used on several structural parts. The NPRM proposed to require a one-time eddy current conductivity measurement of certain cabin, cargo compartment, and frame structural parts to determine if aluminum alloy with inadequate heat treatment was used, and replacement if necessary. We are issuing this AD to detect and replace structural parts made of aluminum alloy with inadequate heat treatment. This condition could result in reduced structural integrity of the airplane.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Airworthiness Directive 2015-0219, dated November 3, 2015 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Airbus Model A318-112 airplanes, A319-111, -112, -115, -132, and -133 airplanes,

A320-214, -232, and -233 airplanes, and A321-211, -212, -213, -231, and -232 airplanes.

The MCAI states:

Following an Airbus quality control review on the final assembly line, it was discovered that aluminum alloy with inadequate heat treatment were delivered by a supplier for several structural parts. The results of the investigations highlighted that 1% of the stock could be impacted by this wrong material.

Structural investigations demonstrated the capability to sustain the static limits loads, and sufficient fatigue life up to a certain inspection threshold.

This condition, if not detected and corrected, could reduce the aeroplane structural integrity following fatigue load.

To address this potential unsafe condition, Airbus issued Service Bulletin (SB) A320-53-1292, SB A320-53-1293, and SB A320-53-1294 to provide inspection instructions.

For the reasons described above, this [EASA] AD requires a one-time Special Detailed Inspection (SDI) [i.e., eddy current conductivity measurement] of certain cabin, cargo compartment and frame parts [for material identification] and, depending on findings, replacement with serviceable parts.

You may examine the MCAI in the AD docket on the Internet at

<http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-6431.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comment received on the NPRM and the FAA's response.

Request to Include the Correction in the Technical Adaptation to Certain Service Information

Virgin America asked that we include the correction in Airbus Technical Adaptation (TA) 80095365/011/2016, Issue 1, dated December 1, 2016, to

Figure A-GVAAA and Figure A-GRAAA of Airbus Service Bulletin A320-53-1293, dated July 30, 2015, in this AD. Virgin America stated that the parts shown in Figure A-GVAAA and Figure A-GRAAA and highlighted for inspection are the four hinge brackets identified as having part number (P/N) “D4918518320201, A-profile.” However, the correct identification is P/N “D4918518320200, A-profile.” Virgin America noted that Airbus issued TA 80095365/011/2016, Issue 1, to update Figure A-GVAAA and Figure A-GRAAA of Airbus Service Bulletin A320-53-1293, dated July 30, 2015, to identify the correct part number. Virgin America also stated that the TA specified that Airbus Service Bulletin A320-53-1293 is currently under revision and the correction will be included when the revision is issued.

We agree with the commenter’s request to include the specified correction. We have added a new paragraph (h) to this AD to provide an exception to Figure A-GVAAA of Airbus Service Bulletin A320-53-1293, dated July 30, 2015, which is needed for compliance with paragraph (g) of this AD. However, Figure A-GRAAA, “Reporting Sheet,” of Airbus Service Bulletin A320-53-1293, dated July 30, 2015, is not needed for compliance with this AD. We have added a note to paragraph (h) of this AD to provide the information in Airbus Technical Adaptation (TA) 80095365/011/2016, Issue 1, dated December 1, 2016, which specifies the corrected information for Figure A-GVAAA and Figure A-GRAAA of Airbus Service Bulletin A320-53-1293, dated July 30, 2015. We have also added paragraph (j) to clarify that reporting is not required by this AD; however, reporting is recommended for research and tracking. We have redesignated subsequent paragraphs accordingly.

Conclusion

We reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting this AD with the changes described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

Related Service Information under 1 CFR part 51

We reviewed the following service information:

- Airbus Service Bulletin A320-53-1292, dated July 23, 2015; including Appendixes 01 and 02, dated July 23, 2015.
- Airbus Service Bulletin A320-53-1293, dated July 30, 2015; including Appendixes 01 and 02, dated July 30, 2015.
- Airbus Service Bulletin A320-53-1294, dated July 23, 2015; including Appendixes 01 and 02, dated July 23, 2015.

The service information describes procedures for a one-time eddy current conductivity measurement of certain cabin, cargo compartment, and frame structural parts to determine if aluminum alloy with inadequate heat treatment was used, and replacement of any affected part with a serviceable part. These documents are distinct

since they apply to different parts on the airplane. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

We estimate that this AD affects 46 airplanes of U.S. registry.

We also estimate that it takes about 6 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of this AD on U.S. operators to be \$23,460, or \$510 per product.

We have received no definitive data that enables us to provide cost estimates for the on-condition actions specified in this AD.

According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all available costs in our cost estimate.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress

charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2017-05-12 Airbus: Amendment 39-18823; Docket No. FAA-2016-6431; Directorate Identifier 2015-NM-182-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to the Airbus airplanes identified in paragraphs (c)(1) through (c)(4) of this AD, certificated in any category; manufacturer serial numbers 4895, 4903, 4911, 4919, 4929, 4938, 4942, 4944, 4946, 4948, and 4951, 4956 through 5541 inclusive, 5544, 5547, 5550, 5551, 5553, 5556, 5559, 5561, 5562, 5563, 5565, 5566, 5570, 5572, 5576, and 5578.

(1) Airbus Model A318-112 airplanes.

(2) Airbus Model A319-111, -112, -115, -132, and -133 airplanes.

(3) Airbus Model A320-214, -232, and -233 airplanes.

(4) Airbus Model A321-211, -212, -213, -231, and -232 airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 53, Fuselage.

(e) Reason

This AD was prompted by a quality control review on the final assembly line, which determined that aluminum alloy with inadequate heat treatment had been delivered and used on several structural parts. We are issuing this AD to detect and replace structural parts made of aluminum alloy with inadequate heat treatment. This condition could result in reduced structural integrity of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) One-time Measurement

Within 6 years since the date of issuance of the original certificate of airworthiness or the date of issuance of the original export certificate of airworthiness:
Do a one-time eddy current conductivity measurement of the cabin, cargo compartment, and frame structural parts identified in the “Affected P/N (part number)” column of tables 1, 2, and 3 to paragraphs (g) and (i) of this AD to determine if aluminum alloy with inadequate heat treatment was used, in accordance with the Accomplishment Instructions of the applicable service information identified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD, except as required by paragraph (h) of this AD.

(1) For cabin structural parts: Airbus Service Bulletin A320-53-1292, dated July 23, 2015; including Appendixes 01 and 02, dated July 23, 2015.

(2) For cargo compartment structural parts: Airbus Service Bulletin A320-53-1293, dated July 30, 2015; including Appendixes 01 and 02, dated July 30, 2015.

(3) For frame structural parts: Airbus Service Bulletin A320-53-1294, dated July 23, 2015; including Appendixes 01 and 02, dated July 23, 2015.

Table 1 to Paragraphs (g) and (i) of this AD – *Parts to be Inspected/Installed*
(*Airbus Service Bulletin A320-53-1292*)

Affected P/N	Acceptable Replacement P/N	Area
D2127245500000	D2127245500000	Cabin
D2127247600200	D2127247600200	Cabin
D2127247600300	D2127247600300	Cabin
D2127399900200	D2127399900200	Cabin
D2127399900300	D2127399900300	Cabin
D2127698900800	D2127698900800	Cabin
D2127698902400	D2127698902400	Cabin
D2527075131200	D2527075131251	Cabin
D2527075131300	D2527075131351	Cabin
D2527075138000	D2527075138000	Cabin
D2527075138100	D2527075138100	Cabin
D2527075138200	D2527075138200	Cabin
D2527075138300	D2527075138300	Cabin
D2527075138600	D2527075138651	Cabin
D2527075138800	D2527075138851	Cabin
D2527240220600	D2527240220651	Cabin
D2527240220700	D2527240220751	Cabin

Affected P/N	Acceptable Replacement P/N	Area
D2527240220800	D2527240220851	Cabin
D9249591201000	D9249591201000	Cabin
D9249591201800	D9249591201800	Cabin
D9249591227800	D9249591227851	Cabin
D9249591227900	D9249591227951	Cabin
D9249591228000	D9249591228051	Cabin
D9249591228100	D9249591228151	Cabin

Table 2 to Paragraphs (g) and (i) of this AD – *Parts to be Inspected/Installed*
(Airbus Service Bulletin A320-53-1293)

Affected P/N	Acceptable Replacement P/N	Area
D2707033520000	D2707033520000	Cargo
D2827027120000	D2827027120000	Cargo
D2827093500400	D2827093500400	Cargo
D2907013701200	D2907013701251	Cargo
D2907013800400	D2907013800451	Cargo
D3247012900000	D3247012900051	Cargo
D3817003820000	D3817003820000	Cargo
D3817012320200	D3817012320251	Cargo
D3837021201600	D3837021201600	Cargo
D3837033300400	D3837033300400	Cargo
D4918518320200	D4918518320200	Cargo
D5347043420400	D5347043420451	Cargo
D9248511000000	D9248511000051	Cargo
D9249254100200	D9249254100251	Cargo
D9249282300000	D9249282300000	Cargo

**Table 3 to Paragraphs (g) and (i) of this AD – Parts to be Inspected/Installed
(Airbus Service Bulletin A320-53-1294)**

Affected P/N	Acceptable Replacement P/N	Area
D2827098326800	D2827098326851	Frame
D5347051620600	D5347051620651	Frame
D5347051720600	D5347051720651	Frame
D5347057120000	D5347057120051	Frame
D5347067520600	D5347067520651	Frame
D5347067521400	D5347067521451	Frame
D5347067520800	D5347067520851	Frame
D5347067521000	D5347067521051	Frame
D5347067521600	D5347067521651	Frame
D5347067620600	D5347067620600	Frame
D5347067720200	D5347067720251	Frame
D5347067720400	D5347067720451	Frame
D5347986520200	D5347986520251	Frame

(h) Exception to Paragraph (g) of this AD

Where Subtask 531293-832-207-001 of Airbus Service Bulletin A320-53-1293, dated July 23, 2015; including Appendixes 01 and 02, dated July 23, 2015, specifies inspecting Item 19 of Figure A-GVAAA for material heat treatment conformity, and that figure (incorrectly) identifies the inspection area for Item 19 as the four hinge brackets adjacent to the A-profile, this AD requires inspecting part number D491-85183-202-00, which is the A-profile, and not just the brackets.

Note 1 to paragraph (h) of this AD: Airbus Technical Adaptation 80095365/011/2016, Issue 1, dated December 1, 2016 (“TA”) specifies that for Figure A-GVAAA, Sheet 01, of Airbus Service Bulletin A320-53-1293, dated July 30, 2015,

Item 19 should point to part number D491-85183-202-00 (and not just to the brackets). The TA also specifies that for Figure A-GRAAA, Sheet 01, of Airbus Service Bulletin A320-53-1293, dated July 30, 2015, the correct Item 19 identification is part number D491-85183-202-00.

(i) Replacement

If during the measurement required by paragraph (g) of this AD, any affected part number specified in table 1, 2, or 3 to paragraphs (g) and (i) of this AD is found to have a measured value greater than that specified in Figure A-GFAAA, Sheet 01, “Inspection Flowchart,” of the applicable service information identified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD: Before further flight, replace the affected part with the corresponding acceptable replacement part specified in table 1, 2, or 3 to paragraphs (g) and (i) of this AD, in accordance with the Accomplishment Instructions of the applicable service information identified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD.

(j) No Reporting Requirement

Although the service information identified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD specifies to submit certain information to the manufacturer, this AD does not include that requirement.

(k) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In

accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone: 425-227-1405; fax: 425-227-1149. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(3) Required for Compliance (RC): If any service information contains procedures or tests that are identified as RC, those procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy

condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

(l) Related Information

Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2015-0219, dated November 3, 2015, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-6431.

(m) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Airbus Service Bulletin A320-53-1292, dated July 23, 2015; including Appendixes 01 and 02, dated July 23, 2015.

(ii) Airbus Service Bulletin A320-53-1293, dated July 30, 2015; including Appendixes 01 and 02, dated July 30, 2015.

(iii) Airbus Service Bulletin A320-53-1294, dated July 23, 2015; including Appendixes 01 and 02, dated July 23, 2015.

(3) For service information identified in this AD, contact Airbus, Airworthiness Office – EIAS, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France;

telephone: +33 5 61 93 36 96; fax: +33 5 61 93 44 51; email:

account.airworth-eas@airbus.com; Internet: <http://www.airbus.com>.

(4) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on March 2, 2017.

Michael Kaszycki,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

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